

Single channel water monitoring system

Controlled and reliable measurements are driven by Kuntze Krypton® systems. The measuring system includes all customer needs for disinfectant measurement: instrument, sensors, assembly and cables. The water measurement process can be controlled at any time, from any place, on any device via Kuntze's Cloud Connect® service. All Kuntze products are Made in Germany.



a. Instrument Neon® pR



Applications



Process Water



Disinfection



Drinking Water



Food & Beverage



Cooling Water



Waste Water
Treatment



Pool & Spa

Technical data

Measuring range

pH-value	-2.00.. +16.00 pH
ORP	-1500.. +1500 mV

Input characteristics

Temperature measuring range	-22° .. 284° F
Temperature compensation	Nonlinear (pH)
Digital input	1 as controller stop by external contact option: 2nd as controller stop or flow measurement for volume based dosing

Output characteristics

Alarm relay	1 potential-free NO contact, max. 250 V, 6 A, 550 VA (invertable)
Output signal	Option: 2 x 0/4 .. 20 mA (scaleable, galvanically isolated)
	Load max. 500 Ohm
	Registration range Scaleable within the measuring range
Voltage output	+/- 6 VDC for impedance converter
Storage media	SD card up to 1 GB - Industry standard
Serial interface	Option: RS 485 - modbus RTU
	Baud rate 19200 bps
	Data format 8 bit

Power supply

Line voltage	85.. 265 V AC, +6/-10%, 50.. 60Hz option: 24 V DC
Power consumption	10 VA

Process conditions

Temperature	Storage -4° ..+149°F
	Operation 0.. +50°C (32°.. 122°F)
Humidity	max. 90% rH at 40°C (non-condensing)
Protection class	Wall mounted IP 65
	Panel mounted IP 54 (front), IP 30 (housing)

Controller

Control response	Option: on/off controller (adjustable hysteresis) P/PI/ PID controller (pulse-pause, pulse-frequency or continuous output) servo motor control
Relay	2 relays, each with a potential-free NO contact, max. 250V, 6 A, 550 VA
Start delay	0.. 200 sec until controller active
Controller stop	Digital input

Proportion to volume

Control mode	Option: volume based by flow measurement
Flow measurement	Impulse measurement NPN (by digital input 2)
Flow measurement	Engine speed 0.030.. 9.999 l/Imp
Relay 1	Potential-free NO contact, max. 250V, 6 A, 550 VA (pulse-pause, pulse-frequency)
Relay 2	Activating circulation pump

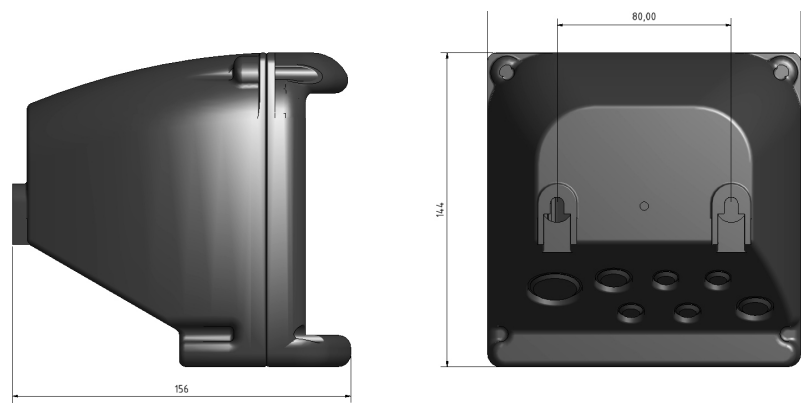
Design configuration

Material	ABS
Dimensions	144 x 144 x156 mm
Weight	1.0 kg
Connection	Cable inlet: 2x M16, 2x M12 + optional: 2x M12 and 1x M25 plug-in terminal: rigid /flexible 0.2-2.5 mm ² / 0.2-2.5 mm ² measurement rigid /flexible 0.2-1 mm ² / 0.2-1.5 mm

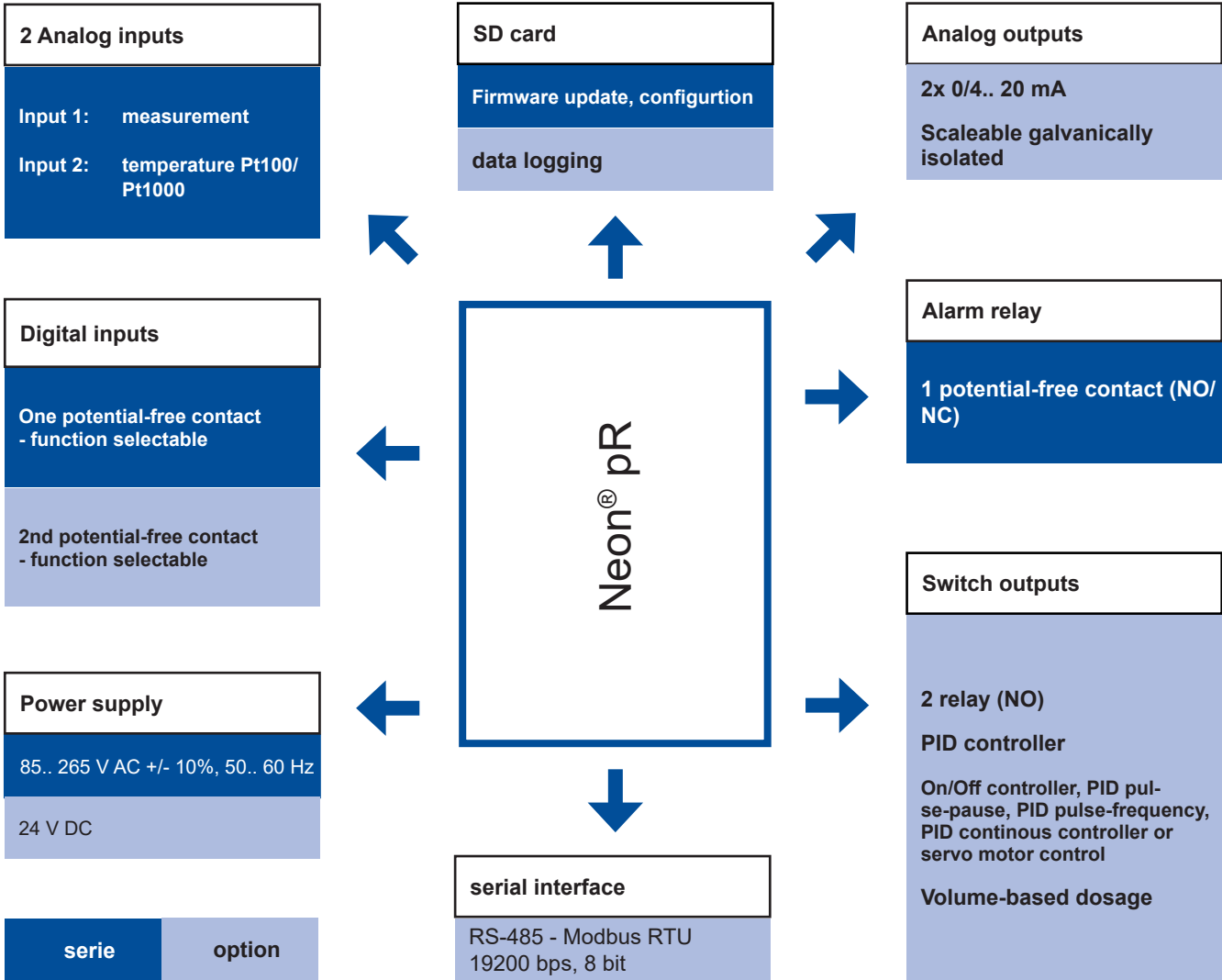
Certificates and approvals

CE-Symbol	The product meets the requirements of the harmonized European standards and complies with the legal requirements of the EC directives.
EMC	EN 61000 6-1 (3) EN 61000 6-2 (4) EN 61326-1

Mechanical drawing



Interface diagram



b. Assembly Argon® Flow

Argon® Flow is a modular assembly which excels by its efficient design. It is assembled and tested. The assembly of two chambers: one chamber is equipped with a float and the second is meant for a sensor in 12 mm sensor design.



Technical data

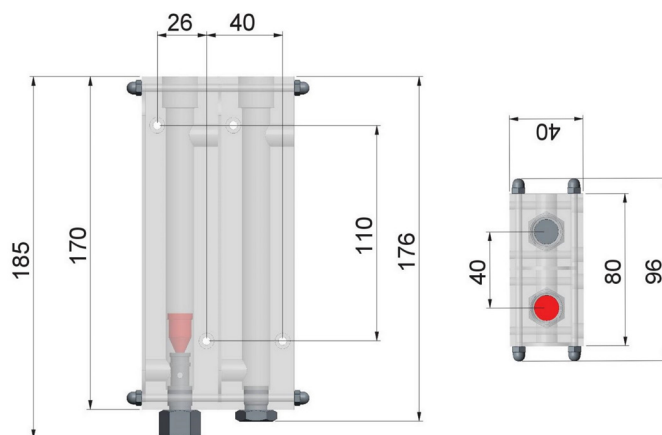
Process conditions

Max. pressure max. 87 psi (at 68° F)
Temperature 32°.. 122°F

Mechanical construction

Material body: PMMA connections: PVC
Dimensions 170 x 80 x 40 mm
Installation in-/outlet: 1/4" female thread; sample cock: 1/4" female thread

Mechanical drawing



c. Sensor Zirkon® pH Universal



Applications



Disinfection



Drinking Water



Food & Beverage



Cooling Water

Technical data

Measuring parameter

pH-value 0.. 14 pH

Ambient conditions

Min. conductivity > 150 $\mu\text{S}/\text{cm}$

Temperature 23.. 158 °F

Pressure
plug PG < 29 psi at 68° F
resin shaft < 15 psi at 68° F
PG 13.5 loose < 15 psi at 68° F

Mechanical construction

Junction Zircon

Shaft material Glass, resin

Mechanical Construction 120 mm, 160 mm, 225 mm

Electrode material AH glass ball

Reference system Ag/AgCl/Tepox gel

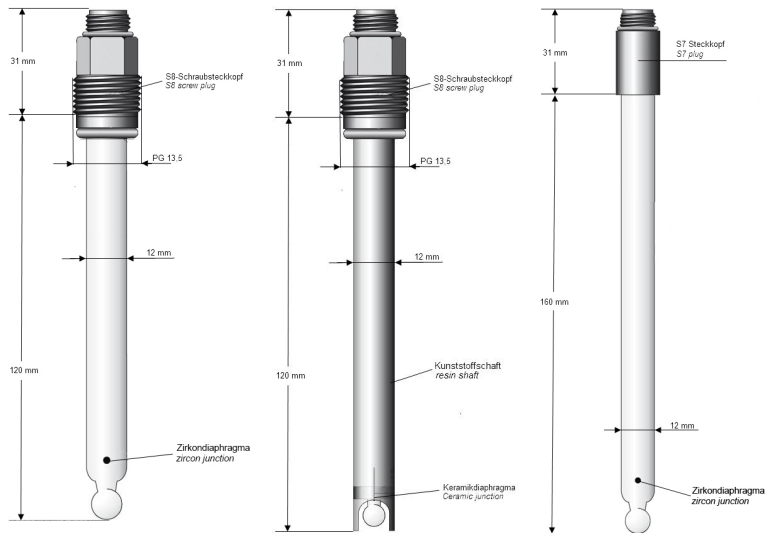
Internal buffer pH 7

Process connection S8 plug (swivel PG 13.5), S7 plug, Variopin (swivel PG 13.5), fixed cable

Electrical connection 2 or 6 pole connection

Temperature sensor none, Pt100, Pt1000

Measuring drawing



Versions

Artikelnummer	Typ/Ausführung	Beschreibung
S24131110K	201012100	pH sensor: 1 mm zircon junction, Tepox gel, S8 plug (swivel PG 13,5), 120 mm
S24131100K	201012320	pH sensor: 1 mm zircon junction, Tepox gel, S7 plug, 160 mm
S24132650K	201012103	pH sensor: zircon junction, Tepox gel, S8 plug (swivel PG 13,5), 120 mm resin shaft
S24132111K	201112400	pH sensor: Pt 100, zircon junction, Tepox gel, Variopin plug (swivel PG 13,5), 120 mm

d. Accessory sensor Pt-55-W

Pt-55-W is a sensor for measuring temperatur.



Process conditions

Max. pressure	max. 87 psi at 68° F
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Mechanical construction

Shaft material	resin
Electrical connection	M12 plug (swivel PG 13.5)